



# Children

Provided by the Wisconsin Information for State Health Policy Program, a program funded by the Division of Health and the Robert Wood Johnson Foundation.

Comments and suggestions on improving the profiles may be addressed to:

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# LIST OF TABLES AND FIGURES

<b>DEMOGRAP</b>	HICS OF CHILDREN	
Table 1.	Number of Children Ages 0-17, 1990 and 1994	1
Table 2.	Living Arrangements of Children Ages 0-17, 1990	1
Table 3.	Percent of Children Ages 0-17 in Selected Poverty Categories, 1989	2
Figure 1.	Percent of Children Ages 0-17 in Poverty, 1989	
Table 4.	Number of Children Ages 0-17 by Race/Ethnicity, 1990	
Figure 2.	Percent of Children Ages 0-17 in Poverty by Race/Ethnicity, 1989	
Table 5.	Living Arrangements of Children Ages 0-17 in Parental Households, 1990	
Figure 3.	Percent of Children Ages 0-17 in Poverty by Family Type, 1989	4
Figure 4.	Type of Health Care Coverage for Children Ages 1-14	5
Figure 5.	Health Care Coverage Over Past Year, Children Ages 1-14	
Figure 6.	Health Status of Wisconsin Children Ages 1-14	
HEALTH SE	RVICES	
Figure 7.	Most Recent Visit to a Doctor, Children Ages 1-14	6
Figure 8.	Most Recent General Physical Examination, Children Ages 1-14	
Figure 9.	Treated in Hospital Emergency Room During Past Year, Children Ages 1-14	
Figure 10.	Most Recent Visit to a Dentist, Children Ages 3-14	
Figure 11.	Percent of Children Ages 8-14 Who Have Had Dental Sealants Placed on Their Teeth	
Table 6.	Primary Care Physicians Who Provide Pediatric Care, 1993	
Table 7.	Other Health Care Professionals Who May Provide Pediatric Care, 1993	
Table 8.	Number of "Preventable" Hospitalizations by Selected Diagnoses,	)
Table 8.	Children Ages 1-14, 1994	10
Table 9.	"Preventable" Hospitalizations for Children Ages 1-14,	
	Five-Year Average, 1990-1994.	10
Figure 12.	"Preventable" Hospitalizations as a Percent of All Hospitalizations	
C	Among Children Ages 1-14, 1994	11
Table 10.	Number and Total Charges for "Preventable" Hospitalizations by	
	Source of Payment, Children 1-14, 1994	11
Table 11.	Number of Hospitalizations for Leading Diagnoses, Children Ages 1-14, 1994	
CHILD MOR	TALITY	
Table 12.	Five-Year Average Child Mortality, 1990-94	12
DDOCD AM II	NFORMATION	
Table 13.		12
	Children in Selected Programs, 1994	13
Table 14.	Number of Children with Selected Fee-For-Service (FFS) Medicaid Services by	1 4
Eigura 12	Eligibility Status, 1994	
Figure 13.	Selected Nutritional Status Indicators for Children Ages 0-4 Enrolled in WIC, 1994.	
Table 15.	Number of Children with High Blood Lead Levels, 1995	
Table 16.	Reports of Child Abuse and Neglect, Children Ages 0-17, 1994	10
TECHNICAL	NOTES	17

#### **FOREWORD**

Community Health Profiles: Children is the second in a series of three subject-specific profiles. These profiles were developed to provide information for the improved coordination of public and private sector efforts to reduce acute care needs by increasing prevention and primary care services and outreach. The first profile in the series is about pregnant women and infants; the third is about people with chronic conditions.

The profiles evolved from a series of discussions, begun in 1992, between decision-makers in Wisconsin who met to identify key health policy issues for which information was needed. Participants identified primary care and prevention as key mechanisms for reducing health care costs. The Wisconsin Information for State Health Policy Program (InfoSHPP), which seeks to improve the availability and usefulness of health information for policy-makers in the state, was an outgrowth of those discussions.

During the early phases of InfoSHPP, local communities were recognized as the primary arenas for implementing effective change to improve the health of children. In response, the profiles were developed to address the need for local information in a user-friendly format. Profiles have been developed for each Wisconsin county, for each of Wisconsin's five largest cities (Kenosha, Madison, Milwaukee, Racine, and Green Bay), for a selected group of zip codes in the city of Milwaukee, for the five Division of Health regions, and for the state as a whole.

Community Health Profiles: Children makes a special contribution to local health information by providing:

- a focus on the specific topic of children's health;
- information from a variety of data sources, including both population-based and program participant information;
- a narrative highlighting related *statewide* information for each table and graph;
- comparable statewide, regional and local information (statewide and regional information is shown, even when numbers are too small to present for local areas);
- a ranking system for selected measures of health so that community comparisons can be made.

A companion report, *Children's Health in Wisconsin: Statewide Estimates*, focuses on statewide information. This report incorporates an extensive narrative and provides information about children's health that is not available for local areas, including variations in estimates by children's age, socioeconomic factors and health care coverage.

Many people contributed their time and ideas through a collaborative planning process to produce these profiles. Special acknowledgment goes to the members of the children's health information work group formed in connection with the Information for State Health Policy Program, which helped to define the content and format of the profiles; to the Bureau of Health Care Financing, which provided Medicaid data; to the Bureau of Public Health, for providing

blood lead information and WIC (Special Supplemental Nutrition Program for Women, Infants and Children) data; to the Division of Community Services, for Birth to Three data and information on child abuse and neglect; and to the Office of Health Care Information, for data tapes of hospital inpatient discharges and health care provider surveys.

The profiles were prepared in the Center for Health Statistics. Yvonne Brandreth had primary responsibility for the design and production of the profiles. Angela Bethel "desk-top published" the profiles, including importing the data into the tables and graphics. Patricia Nametz helped define the content of the profiles and wrote the statewide companion report. Patricia Guhleman, InfoSHPP Program Coordinator, provided consultation in all phases of production.

The following individuals provided data and expertise: Robert Adler for data from U.S. Census and Wisconsin death certificate files; Eleanor Cautley and Fred Krantz for data from the Family Health Survey; Laura Owens for data from the preventable hospitalization file, the hospital inpatient tapes, and physician survey; Bernie Tennis for data from the surveys of other health care professionals; Eileen McRae and Dan Spencer for Medicaid data; and Linda Spaans-Esten and Glenn Thompson for WIC data.

Your comments and suggestions on improving the profiles are appreciated. Please direct them to Patricia Guhleman (608-257-5221 or guhlepa@dhfs.state.wi.us) at the Center for Health Statistics. On the Internet, go to: http://www.dhfs.state.wi.us/ for instructions about accessing the *Profiles*.

Requests for Children's Health in Wisconsin: Statewide Estimates should be addressed to:

Center for Health Statistics Division of Health Department of Health and Family Services P.O. Box 309, Room 172 Madison WI 53701-0309

#### **DEMOGRAPHICS**

Table 1. Number of Children Ages 0-17, 1990 and 1994

	1990	1994	Percent	1994	1994
Age Group	Census	<b>Estimate</b>	Change	Males	<b>Females</b>
<1	2,110	2,040	-3%	1,050	990
1-4	8,200	7,960	-3%	4,070	3,900
5-14	18,900	22,710	20%	11,720	10,990
15-17	5,240	5,740	10%	2,880	2,860
Total 0-17	34,450	38,450	12%	19,720	18,740

Source: 1990 data are from the 1990 Census of Population and Housing, Modified Age-Race-Sex (MARS) file. 1994 estimates are from the Wisconsin Center for Health Statistics.

Note: The focus of this profile is children ages 1-14. Because some data sources do not permit an isolation of this age group, the numbers of children less than one year old and ages 15-17 are presented here for background information. Numbers have been rounded to the nearest 10.

Table 2. Living Arrangements of Children Ages 0-17, 1990

	Parental	Other Relative's	Non- Relative's		
Age Group	Household	Household	Household	Other	Total
0-4	90.5%	7.7%	1.7%	0.1%	100%
5-14	93.7	4.0	2.2	0.1	100
15-17	93.7	3.6	2.4	0.3	100
Total 0-17	92.8	5.0	2.1	0.1	100%

Source: 1990 Census of Population and Housing, Summary Tape File 1.

Note: This table includes all children under 18 years of age. Children's living arrangements are identified according to their relationship to the household head (householder). The "other" category includes children living in group homes or institutions.

"Other relative's household" and "non-relative's household" may include a child's parent. For example, the householder could be a grandparent in a three-generation home, or a friend of the parent who lives in the household

From 1990 to 1994, the number of preschool-aged children in Wisconsin decreased, while the number of schoolaged children increased.

Statewide, children under five years of age are more likely than older children to be living in a household headed by someone other than their parent(s).

Table 3. Percent of Children Ages 0-17 in Selected Poverty Categories, 1989

Age	<100%	100-149%	150-174%	175-184%	185+%	Total
0-4	18%	9%	5%	2%	66%	100%
5-11	16	10	6	2	66	100
12-17	13	7	4	2	75	100
Total 0-17	16	9	5	2	69	100%

Source: 1990 Census of Population and Housing, Summary Tape File 4.

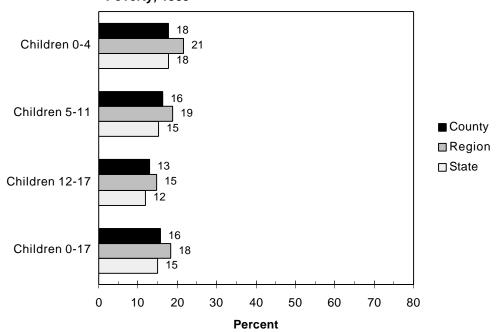
Note: Poverty status is based on 1989 family income reported in the 1990 Census. (See Technical Notes.)

The first column reflects the percent of children officially "in poverty," that is, below 100 percent of the poverty level (\$12,674 for a family of four in 1989). Children in families with incomes of 100 to 149 percent of the poverty level are in the second column, and so on.

poverty, based on
1989 household
income reported to
the U.S. Census.

About 15 percent of Wisconsin children ages 0-17 lived in households with income below

Figure 1. Percent of Children Ages 0-17 in Poverty, 1989



The proportion of Wisconsin children in poverty was higher among the youngest children, ages 0-4 (18 percent), and children ages 5-11 (15 percent) than among older children, ages 12-17 (12 percent).

Source: 1990 Census of Population and Housing, Summary Tape File 4a.

Note: "In poverty" means that 1989 household income was less than 100 percent of the federal poverty guidelines. (See Technical Notes for more detail.)

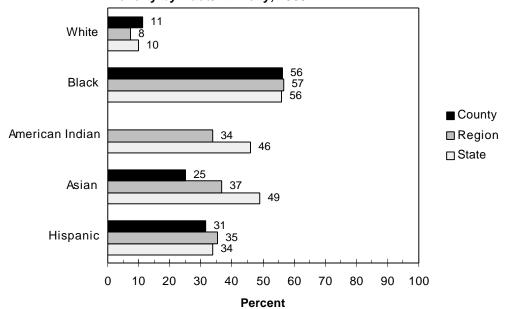
Table 4. Number of Children Ages 0-17 by Race/Ethnicity, 1990

	American				
Age Group	White	Black	Indian	Asian	Hispanic
<1	1,750	160	0	20	180
1-4	6,930	580	30	60	600
5-14	16,070	1,310	80	110	1,330
15-17	4,540	300	20	30	350
Total 0-17	29,290	2,350	130	220	2,460

Source: 1990 Census, Modified Age-Race-Sex (MARS) file.

Note: Race/ethnic categories in this table are mutually exclusive non-Hispanic white, non-Hispanic black, non-Hispanic American Indian, non-Hispanic Asian, and Hispanic. Numbers have been rounded to the nearest 10.

Figure 2. Percent of Children Ages 0-17 in Poverty by Race/Ethnicity, 1989



Source: 1990 Census of Population and Housing, Summary Tape File 4.

Note: Unlike the data in Table 4, race/ethnic categories in this figure are <u>not</u> mutually exclusive. Hispanics thus appear both in the race categories and separately in the Hispanic category. (Hispanics may be of any race.)

"In poverty" means that 1989 household income was less than 100 percent of the federal poverty guidelines. (See Technical Notes for more detail.)

Statewide, about 174,000 children under age 18 were either Hispanic or belonged to a racial minority group.

Statewide in 1989, the proportions of children who lived in households with income below the poverty level were: 10 percent of white children, 56 percent of black children, 46 percent of American Indian children, 49 percent of Asian children, and 34 percent of Hispanic children.

Table 5. Living Arrangements of Children Ages 0-17 in Parental Households, 1990

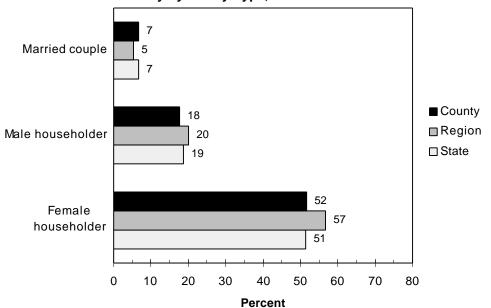
Age Groups	Parent Householder, Spouse Present	Father Householder, No Wife Present	Mother Householder, No Husband Present	All Non- Parental Households	Total
0-4	72%	3%	15%	9%	100%
5-14	74	2	17	6	100
15-17	74	4	16	6	100
Total 0-17	74	3	16	7	100%

Statewide in 1990, about 77 percent of children lived in a married-couple household headed by a parent.

Source: 1990 Census of Population and Housing, Summary Tape File 3.

Note: This table provides more detail about children living in parental households than is shown in Table 2. The Census classifies children living with a parent who is not the householder as living in a "non-parental household."

Figure 3. Percent of Children Ages 0-17 in Poverty by Family Type, 1989



Children living in families with a female householder (no spouse present) experienced higher poverty rates than other children.

Source: 1990 Census of Population and Housing, Summary Tape File 3a.

Note: The Census data from which this figure was derived differ somewhat from Table 5. This figure includes all children related to the household head, whether parent or other relative.

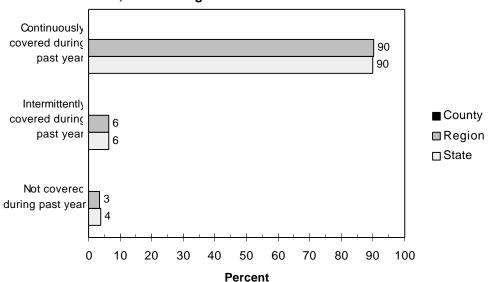
Figure 4. Type of Health Care Coverage for Children Ages 1-14 80 Private insurance 77 (any level) 80 ■ County 12 Medicaid 13 Region 10 □ State 8 No coverage 9 9 0 10 20 30 40 50 60 70 80 90 100 Percent

Most Wisconsin children ages 1-14 had some type of private health care coverage.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: County estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown. (See Technical Notes for comparison of Family Health Survey and Medicaid Program enrollment data.)

Figure 5. Health Care Coverage Over Past Year, Children Ages 1-14



Statewide, about 6 percent of children ages 1-14 had interruptions in their health care coverage during the past year, while 4 percent had no coverage for the entire year.

Source: Family Health Survey, 1993-94 combined data, Center for Health Statistics.

Note: County estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.

Ages 1-14 89 Excellent or very 83 good 85 ■ County Good ■ Region □ State Fair or poor 10 20 30 40 50 60 70 80 90 100 Percent

Figure 6. Health Status of Wisconsin Children

An overwhelming majority of Wisconsin children (97 percent) were reported to have good to excellent health.

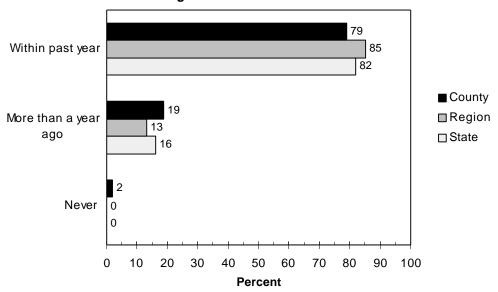
Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: County estimates based on <200 interviews are not shown. Responses may not total

100 percent due to rounding and/or because nonresponse categories are not shown.

### **HEALTH SERVICES**

Figure 7. Most Recent Visit to a Doctor, Children Ages 1-14

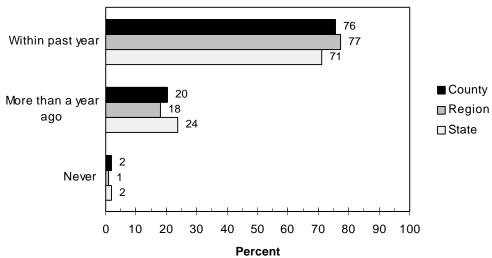


Most (82 percent) Wisconsin children ages 1-14 visited a doctor for either preventive or acute care during the past year.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: County estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.

Figure 8. Most Recent General Physical Examination, Children 1-14

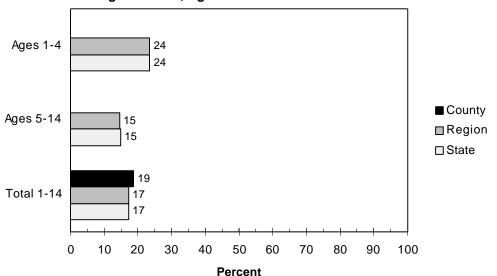


Statewide, about 70 percent of children ages 1-14 received a general physical examination within the past year, an indicator of preventive health care.

Source: Family Health Survey, 1990-94 combined data Center for Health Statistics.

Note: County estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.

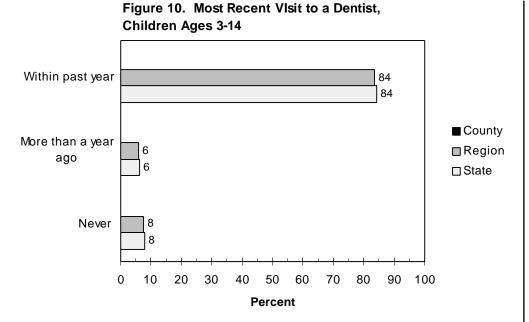
Figure 9. Treated in Hospital Emergency Room During Past Year, Ages 1-14



Seventeen percent of all Wisconsin children ages 1-14 were treated in an emergency room in the past year.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: County estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.



Statewide, more than 80 percent of children ages 3-14 saw a dentist within the past year; about 8 percent have never visited a dentist.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: County estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.

Figure 11. Percent of Children Ages 8-14 Who Have Had Dental Sealants Placed on Their Teeth

County Region State Source: 1994 Family Health Survey, Center for Health Statistics.

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Note:

With the exception of the Southeastern Region, the estimated percent of children with dental sealants in each region is based on a small sample size (see Technical Notes). The possible error in estimation is larger when the sample size is small.

Statewide, an estimated 49 percent of children ages 8-14 had dental sealants placed on their teeth. This percent almost meets the Wisconsin Year 2000 objective of 50 percent.

Table 6. Primary Care Physicians Who Provide Pediatric Care, 1993

	Provide	Serve Medicaid
Specialty	Pediatric Care	<b>Patients</b>
<b>Total Primary Care</b>	29	100%
Family Practice	22	100
Pediatrics	6	100
Internal Medicine	1	100
General Practice	0	0
Obstetrics/Gyn.	0	0
Psychiatry/Child Psych.	1	100

Source: 1993 Physician Profile Survey, Office of Health Care Information,tape edited by Wisconsin Primary Health Care Association.

Note: Physicians were included if they indicated that they provide care in this profile's geographical area. Physicians who provide care in more than one area are included in the profiles for both areas. Psychiatrists are not included in the total primary care count.

The final column of this table indicates the percent of physicians providing pediatric care who reported they serve Medicaid patients.

Table 7. Other Health Care Professionals Who May Provide Pediatric Care, 1993

	Provide	Serve Medicaid
Provider Type	<b>Pediatric Care</b>	<b>Patients</b>
Dentists	59	46%
Advanced Practice Nurses	8	50
Physician Assistants	3	100

Source: Dentist Profile Survey, Advanced Practice Nurse Profile Survey, Physician Assistant Profile Survey, Office of Health Care Information.

Note: **Dentists** were included if they reported any hours per week spent in patient care, <u>and</u> they reported their primary practice as general practice, public health or pediatric dentistry.

**Advanced Practice Nurses** were included if they reported any hours per week spent in clinical care, <u>and</u> they reported their primary clinical practice focus as general practice, family health, pediatrics, or primary care <u>or</u> they answered "yes" to the question "Do you provide pediatric care?"

**Physician Assistants** were included if they reported any hours per week spent in patient care, <u>and</u> they reported the services they provide as family/general practice, pediatrics/general, pediatrics/subspecialty, or public health/prevention.

Statewide in 1993, about 2,000 physicians practicing primary care specialties reported that they provide pediatric care. Most of these physicians reported their practice specialty as Family Practice (1,144) or Pediatrics (507).

Statewide, about half of all dentists reported that they serve Medicaid patients.

Table 8. Number of "Preventable" Hospitalizations by Selected Diagnoses, Children Ages 1-14, 1994

Diagnosis at			Total
Discharge	<b>Ages 1-4</b>	Ages 5-14	Ages 1-14
Asthma	35	19	54
Bacterial pneumonia	49	21	70
Dehydration, primary	23	14	37
Dehydration, secondary	30	27	57
Gastroenteritis	12	5	17
Other "preventable"	30	18	48
Total "Preventable"	179	104	283

Source: Preventable hospitalization file, data extracted from the Officeof Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: "Preventable hospitalizations" include all hospitalizations for the 28 conditions that have been defined as "ambulatory-care-sensitive." (See Technical Notes for ICD-9-CM codes and a description of the process for defining ambulatory-care-sensitive conditions.) Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected.

Provision of timely and appropriate preventive and primary care can decrease hospitalizations for ambulatory-care-sensitive conditions by:

- preventing the onset of the condition;
- controlling an acute episodic illness or condition;
- managing the condition.

Table 9. "Preventable" Hospitalizations for Children Ages 1-14, Five-Year Average, 1990-1994

	Average Annual	Ra	te	Yo	our County	ls:
Age Groups	Number	County	State	Low	Medium	High
1-4	200	24.7	17.6			X
5-14	102	4.9	5.4		X	
Total "Preventable"	301	10.4	8.8			X

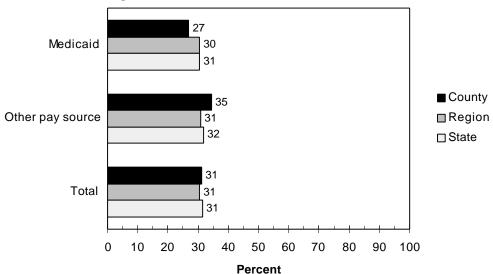
Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: Rate is the number of "preventable" hospitalizations per 1,000 children  $\dot{\mathbf{n}}$  the age group. Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected. The distribution of preventable hospitalization rates determines the county rank. A county is "low" if it is in the lowest quartile ( $\leq 14.3$  for age group 1-4;  $\leq 4.0$  for age group 5-14;  $\leq 6.8$  for age group 1-14), or "high" if it is in the highest quartile  $\geq 22.0$  for age group 1-4;  $\geq 5.9$  for age group 5-14;  $\geq 9.9$  for age group 1-14).

Statewide, about 8,000 hospitalizations of children ages 1-14 in 1994 were "preventable" hospitalizations, that is, for conditions that can usually be managed by adequate preventive and primary care.

Statewide, "preventable" hospitalizations of children ages 1-14 averaged 8.8 per 1,000 children annually for the period 1990-1994.

Figure 12. "Preventable" Hospitalizations as a Percent of All Hospitalizations Among Children Ages 1-14, 1994



Statewide, the proportion of children's hospitalizations classified as "preventable" was similar among those billed to Medicaid (31 percent) and those billed to other payers (32 percent).

Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Center for Health Statistics.

Note: Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected and for hospitalizations by pay source and age of child.

Table 10. Number and Total Charges for "Preventable"
Hospitalizations by Source of Payment, Children 1-14, 1994

		Other Pay	
"Preventable" Hospitalizations	Medicaid	Source	Total
Total Number	109	174	283
Percent Emergency Room Admissions	69%	52%	59%
Total Hospital Charges (in thousands)	\$577.5	\$508.0	\$1,085.5

Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistis.

Note: Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected. Hospital charges exclude physician charges.

Statewide in 1994, "preventable" hospitalizations accounted for more than \$25 million in hospital charges for children ages 1-14.

Table 11. Number of Hospitalizations for Leading Diagnoses, Children Ages 1-14, 1994

Diagnosis at Discharge			Total
(ICD-9-CM Codes)	<b>Ages 1-4</b>	Ages 5-14	Ages 1-14
Psychiatric (295-302,306-316)	1	129	130
Injury (800-999)	40	76	116
Asthma (493)	35	19	54
Pneumonia (480-486)	58	22	80
Upper respiratory (460-466)	39	7	46
All other	196	288	484
<b>Total Hospitalizations</b>	369	541	910

Source: Office of Health Care Information, hospital inpatient database.

Note: "Leading diagnoses" are determined by statewide frequencies of first-listed/primary diagnoses for children 1-14.

Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected.

disorders, injuries and asthma were the leading diagnostic categories for hospitalizations of Wisconsin children overall and for those ages 5-14.

In 1994, psychiatric

## **CHILD MORTALITY**

Table 12. Five-Year Average Child Mortality, 1990-94

	Average Annual	Average Mor	tality Rate
Age Group	<b>Number of Deaths</b>	Region	State
1-4	1	39.2	38.3
5-14	3	19.3	21.3
Total	4	24.9	26.0

Source: 1990-94 death certificates, Wisconsin Center for Health Statistics.

Note: The mortality rates for the region and state are the number of deaths per 100,000 children in the age group. No rates by county are presented.

Statewide, about 270 deaths among children ages 1-14 occurred annually from 1990 through 1994.

#### PROGRAM INFORMATION

Table 13. Children in Selected Programs, 1994

Program	Ages	Number of Participants
Medicaid Total	1-4	2,680
AFDC-Related		2,134
Healthy Start		437
SSI and Katie Beckett		107
Medicaid Total	5-14	3,788
AFDC-Related		3,007
Healthy Start		345
SSI and Katie Beckett		436
WIC	1-4	1,759
Birth to Three	<3	182

Source: Bureau of Health Care Financing (Medicaid data); Bureau of Public Health (WIC data); Division of Community Services (Birth to Three data).

Note: Medicaid participant counts are point-in-time estimates that include all eligible children, both those receiving health care on a fee-for-service basis and those enrolled in HMOs (health maintenance organizations). Children may be eligible for Medicaid according to the following classifications:

- AFDC (Aid to Families with Dependent Children)
- Healthy Start a Wisconsin program to extend health care coverage to pregnant women and young children with income levels up to 185 percent of poverty
- SSI (Supplemental Security Income) and Katie Beckett two programs that assist children with serious disabilities.

WIC (the Special Supplemental Nutrition Program for Women, Infants and Children) participant data represent point-in-time counts for December, 1994. (See Technical Notes for WIC program services.)

The Birth to Three Program count is a cumulative total for the one-year period December 1, 1993 through November 30, 1994. Eligibility criteria include:

- Age less than three, and
- A diagnosed developmental disability, or
- A significant delay in one or more areas of development.

Statewide, at any given time in 1994, about 82,000 children ages 1-4 and 128,000 children ages 5-14 were enrolled in Medicaid. About 65,000 children ages 1-4 received WIC services in 1994.

Table 14. Number of Children with Selected Fee-For-Service (FFS)
Medicaid Services by Eligibility Status, 1994

	AFDC-	Healthy	SSI & Katie	
Service	Related	Start	Beckett	Total
Eligible Children Ages 1-4				
(FFS Only)				
Cumulative total for year	3,372	1,090	134	4,008
Point-in-time estimate	2,134	437	102	2,674
Preventive Services				
Comprehensive HealthCheck	670	95	18	783
Any preventive health exam	1,344	280	50	1,674
Eligible Children Ages 5-14 (FFS Only)				
Cumulative total for year	4,379	881	523	5,255
Point-in-time estimate	3,004	345	436	3,786
Preventive Services				
Comprehensive HealthCheck	343	26	39	408
Any preventive health exam	794	91	102	987
Dental Service	1,433	175	153	1,761

The Wisconsin
Medicaid program
paid for nearly
21,000
HealthCheck
examinations for
children ages 1-4
and almost 15,000
examinations for
children ages 5-14
on a fee-forservice basis in
1994.

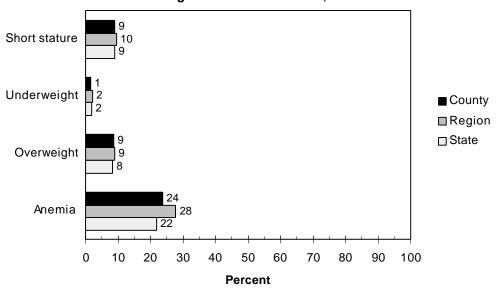
Source: Bureau of Health Care Financing.

Note: The cumulative total represents an unadjusted count of children eligible for Medicaid on a fee-for-service basis in 1994, including those eligible only a portion of the year.

The point-in-time estimate is the cumulative total adjusted for duration of eligibility; this provides a "snapshot" of eligible children at any given time in 1994. The point-in-time counts in this table are not comparable to the data from Table 13 because Table 14 excludes children enrolled in Medicaid HMOs (health maintenance organizations) and includes children who became eligible retroactively.

The category "any preventive health exam" includes both HealthCheck and other comprehensive preventive examinations. (See Technical Notes.)

Figure 13. Selected Nutritional Status Indicators for Children Ages 0-4 Enrolled in WIC, 1994



Statewide, children ages 0-4 enrolled in WIC during 1994 had various nutritional needs, including anemia (22 percent of enrollees).

Source: CDC Pediatric Nutrition Surveillance System, 1994 Annual Summary for Wisconsin.

Data based on reports from all Wisconsin clinics delivering WIC services (Special Supplemental Nutrition Program for Women, Infants and Children).

Note: "Short stature" is low height for age; "underweight" is low weight for height; "overweight" is high weight for height; "anemia" is a low value on a hemoglobin or hematocrit test. Low (or high) values are values below the 5th percentile (or above the 95th percentile) of a reference sample of U.S. children.

Table 15. Number of Children with High Blood Lead Levels, 1995

Number of children with high blood lead levels	259
High levels as a percent of all children screened	18%

Source: Bureau of Public Health.

Note: Data are for fiscal year ending June 30, 1995. "High" blood lead levels are defined as lead levels of 10 micrograms per deciliter or higher.

Number of children with high blood lead levels is based on reports from all testing sources; percent of children screened who have high levels is based on reports from the Milwaukee City Health Department Laboratory, the Racine City Health Department Laboratory, and the Wisconsin State Laboratory of Hygiene.

Statewide, 21 percent of Wisconsin children who were tested for lead exposure had high blood lead levels.

Table 16. Reports of Child Abuse and Neglect, Children Ages 0-17, 1994

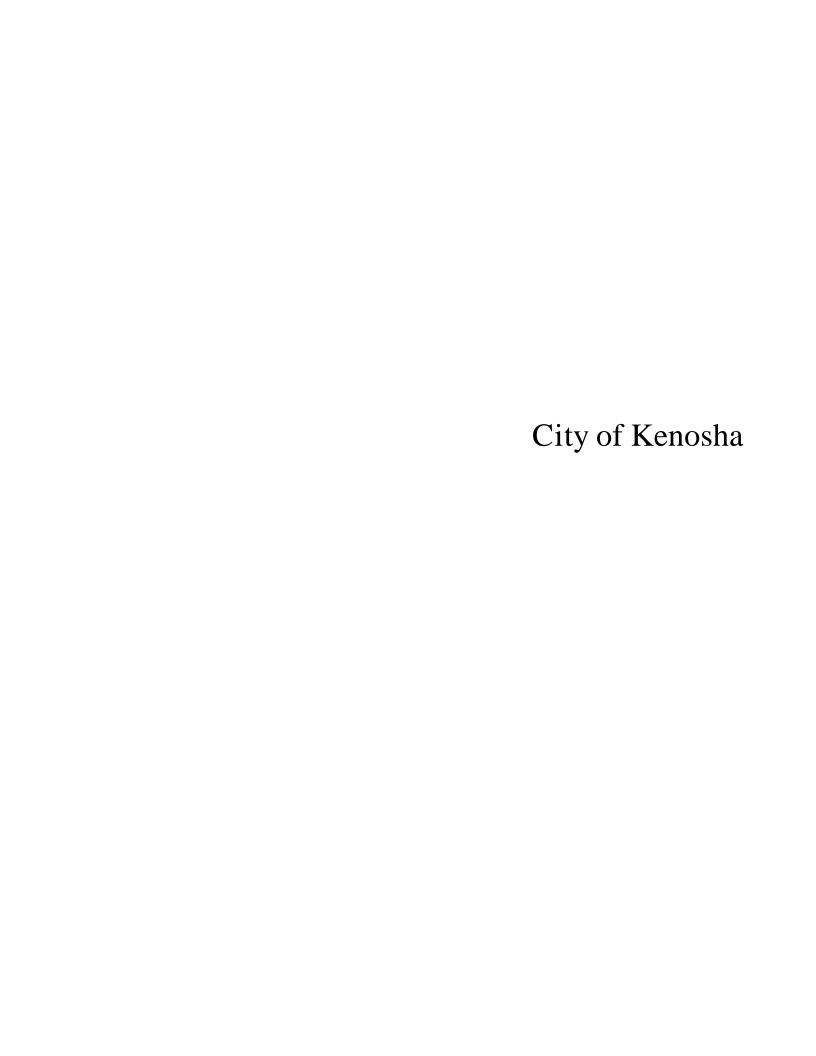
Total reports	1,067
Reports per 1,000 children	31.1
Substantiated reports	301
Substantiated reports per 1,000 children	8.8
Percent of reports substantiated	28%

Source: Division of Children and Family Services, Department of Health and Family Services (*Annual Child Abuse and Neglect Report*, 1994 Data).

Note: "Substantiated" reports are those in which the investigating agency determines the child to be "in need of protective intervention or protective services, or there is an ongoing need for protective services among the principals in the report."

Cases not substantiated are designated either "unsubstantiated" or "not able to substantiate." (See Technical Notes for definitions.)

Statewide, there were 14 substantiated reports of child abuse per 1,000 children in 1994.



#### **DEMOGRAPHICS**

Table 1. Number of Children Ages 0-17, 1990 and 1994

	1990	1994	Percent	1994	1994
Age Group	Census	<b>Estimate</b>	Change	Males	<b>Females</b>
<1	1,410	1,550	10%		
1-4	5,340	5,560	4%		
5-14	11,740	12,400	6%		
15-17	3,280	3,480	6%		
Total 0-17	21,770	22,990	6%		

Source: 1990 data are from the 1990 Census of Population and Housing, Modified Age-Race-Sex (MARS) file. 1994 estimates are from the Wisconsin Center for Health Statistics.

Note: The focus of this profile is children ages 1-14. Because some data sources do not permit an isolation of this age group, the numbers of children less than one year old and ages 15-17 are presented here for background information. Numbers have been rounded to the nearest 10.

Table 2. Living Arrangements of Children Ages 0-17, 1990

		Other	Non-		
	Parental	Relative's	Relative's		
Age Group	Household	Household	Household	Other	Total
0-4	90.3%	7.8%	1.8%	0.1%	100%
5-14	93.4	4.2	2.3	0.1	100
15-17	93.0	3.9	2.6	0.5	100
Total 0-17	92.4	5.2	2.2	0.2	100%

Source: 1990 Census of Population and Housing, Summary Tape File 1.

Note: This table includes all children under 18 years of age. Children's living arrangements are identified according to their relationship to the household head (householder). The "other" category includes children living in group homesor institutions.

"Other relative's household" and "non-relative's household" may include a child's parent. For example, the householder could be a grandparent in a three-generation home, or a friend of the parent who lives in the household

From 1990 to 1994, the number of preschool-aged children in Wisconsin decreased, while the number of schoolaged children increased.

Statewide, children under five years of age are more likely than older children to be living in a household headed by someone other than their parent(s).

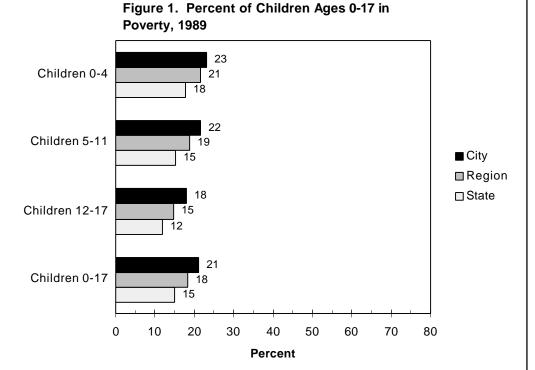
Table 3. Percent of Children Ages 0-17 in Selected Poverty Categories, 1989

Age	<100%	100-149%	150-174%	175-184%	185+%	Total
0-4	23%	9%	5%	2%	62%	100%
5-11	22	10	6	2	60	100
12-17	18	8	4	2	67	100
<b>Total 0-17</b>	21	9	5	2	63	100%

Source: 1990 Census of Population and Housing, Summary Tape File 4.

Note: Poverty status is based on 1989 family income reported in the 1990 Census. (See Technical Notes.)

The first column reflects the percent of children officially "in poverty," that is, below 100 percent of the poverty level (\$12,674 for a family of four in 1989). Children in families with incomes of 100 to 149 percent of the poverty level are in the second column, and so on.



The proportion of Wisconsin children in poverty was higher among the youngest children, ages 0-4 (18 percent), and children ages 5-11 (15 percent) than among older children, ages 12-17

(12 percent).

About 15 percent of Wisconsin children ages 0-17 lived in households with income below poverty, based on 1989 household

income reported to the U.S. Census.

Source: 1990 Census of Population and Housing, Summary Tape File 4a.

Note: "In poverty" means that 1989 household income was less than 100 percent of the federal poverty guidelines. (See Technical Notes for more detail.)

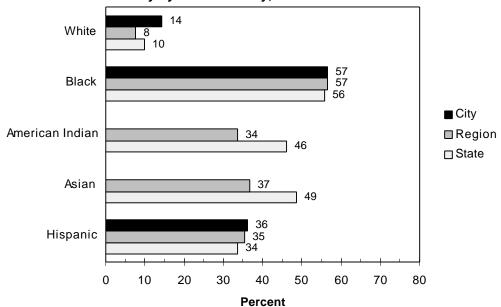
Table 4. Number of Children Ages 0-17 by Race/Ethnicity, 1990

			American		
Age Group	White	Black	Indian	Asian	Hispanic
<1	1,090	160	0	10	160
1-4	4,200	570	20	40	510
5-14	9,230	1,290	40	70	1,120
15-17	2,650	300	20	20	310
Total 0-17	17,170	2,320	80	140	2,100

Source: 1990 Census, Modified Age-Race-Sex (MARS) file.

Note: Race/ethnic categories in this table are mutually exclusive non-Hispanic white, non-Hispanic black, non-Hispanic American Indian, non-Hispanic Asian, and Hispanic. Numbers have been rounded to the nearest 10.

Figure 2. Percent of Children Ages 0-17 in Poverty by Race/Ethnicity, 1989



income below the poverty level were: 10 percent of white children, 56 percent of black children, 46 percent of American Indian children, 49 percent of Asian children, and 34 percent of

Hispanic children.

Statewide in 1989,

the proportions of

children who lived in households with

Source: 1990 Census of Population and Housing, Summary Tape File 4.

Note: Unlike the data in Table 4, race/ethnic categories in this figure are<u>not</u> mutually exclusive. Hispanics thus appear both in the race categories and separately in the Hispanic category. (Hispanics may be of any race.)

"In poverty" means that 1989 household income was less than 100 percent of the federal poverty guidelines. (See Technical Notes for more detail.)

174,000 children under age 18 were either Hispanic or belonged to a racial minority group.

Statewide, about

Table 5. Living Arrangements of Children Ages 0-17 in Parental Households, 1990

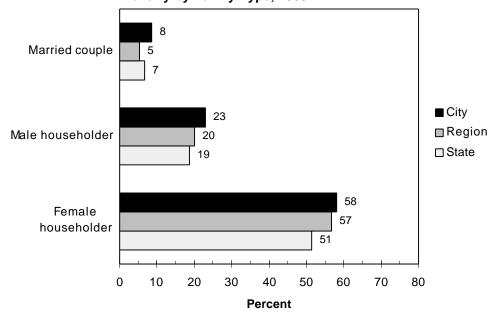
Age Groups	Parent Householder, Spouse Present	Father Householder, No Wife Present	Mother Householder, No Husband Present	All Non- Parental Households	Total
0-4	69%	3%	18%	10%	100%
5-14	69	3	22	7	100
15-17	69	3	21	7	100
Total 0-17	69	3	20	8	100%

Statewide in 1990, about 77 percent of children lived in a married-couple household headed by a parent.

Source: 1990 Census of Population and Housing, Summary Tape File 3.

Note: This table provides more detail about children living in parental households than is shown in Table 2. The Census classifies children living with a parent who is not the householder as living in a "non-parental household."

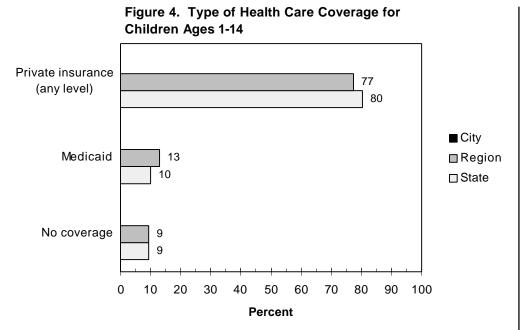
Figure 3. Percent of Children Ages 0-17 in Poverty by Family Type, 1989



Children living in families with a female householder (no spouse present) experienced higher poverty rates than other children.

Source: 1990 Census of Population and Housing, Summary Tape File 3a.

Note: The Census data from which this figure was derived differ somewhat from Table 5. This figure includes all children related to the household head, whether parent or other relative.

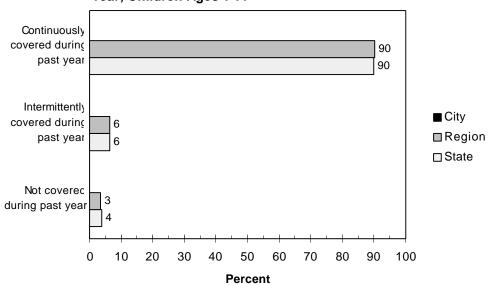


Most Wisconsin children ages 1-14 had some type of private health care coverage.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown. (See Technical Notes for comparison of Family Health Survey and Medicaid Program enrollment data.)

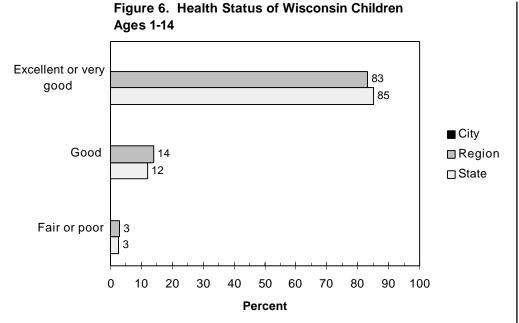
Figure 5. Health Care Coverage Over Past Year, Children Ages 1-14



Statewide, about 6 percent of children ages 1-14 had interruptions in their health care coverage during the past year, while 4 percent had no coverage for the entire year.

Source: Family Health Survey, 1993-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.



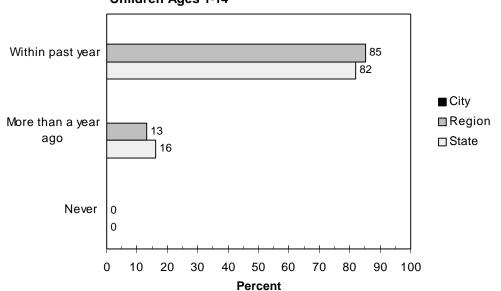
An overwhelming majority of Wisconsin children (97 percent) were reported to have good to excellent health.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.

#### **HEALTH SERVICES**

Figure 7. Most Recent Visit to a Doctor, Children Ages 1-14

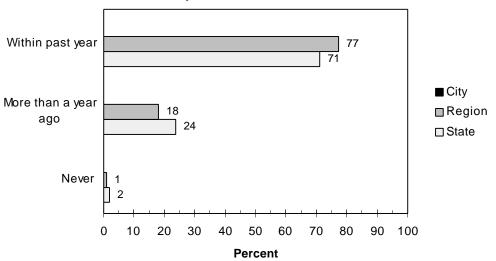


Most (82 percent) Wisconsin children ages 1-14 visited a doctor for either preventive or acute care during the past year.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.

Figure 8. Most Recent General Physical Examination, Children 1-14

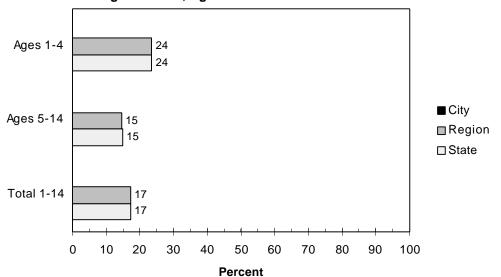


Statewide, about 70 percent of children ages 1-14 received a general physical examination within the past year, an indicator of preventive health care.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.

Figure 9. Treated in Hospital Emergency Room During Past Year, Ages 1-14



Seventeen percent of all Wisconsin children ages 1-14 were treated in an emergency room in the past year.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown.

Children Ages 3-14 Within past year 84 84 ■ City More than a year Region ago 6 □ State Never 8 40 50 60 70 80 0 10 30 90 100 20 Percent

Figure 10. Most Recent VIsit to a Dentist,

Statewide, more than 80 percent of children ages 3-14 saw a dentist within the past year; about 8 percent have never visited a dentist.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.

Have Had Dental Sealants Placed on Their Teeth 70 60 50 Wisconsin 49 50 Year 2000 Objective 40 30 20 10 0 Region State

Figure 11. Percent of Children Ages 8-14 Who

Source: 1994 Family Health Survey, Center for Health Statistics.

With the exception of the Southeastern Region, the estimated percent of children Note: with dental sealants in each region is based on a small sample size (see Technical Notes). The possible error in estimation is larger when the sample size is small.

Statewide, an estimated 49 percent of children ages 8-14 had dental sealants placed on their teeth. This percent almost meets the Wisconsin Year 2000 objective of 50 percent.

Table 6. Primary Care Physicians Who Provide Pediatric Care, 1993

Specialty	Provide Pediatric Care	Serve Medicaid Patients
Total Primary Care	24	100%
Family Practice	17	100
Pediatrics	6	100
Internal Medicine	1	100
General Practice	0	0
Obstetrics/Gyn.	0	0
Psychiatry/Child Psych.	1	100

Source: 1993 Physician Profile Survey, Office of Health Care Information; tape edited by Wisconsin Primary Health Care Association.

Note: Physicians were included if they indicated that they provide care in this profile's geographical area. Physicians who provide care in more than one area are included in the profiles for both areas. Psychiatrists are not included in the total primary care count.

The final column of this table indicates the percent of physicians providing pediatric care who reported they serve Medicaid patients.

Table 7. Other Health Care Professionals Who May Provide Pediatric Care, 1993

	Provide	Serve Medicaid
Provider Type	<b>Pediatric Care</b>	<b>Patients</b>
Dentists	53	51%
Advanced Practice Nurses	7	43
Physician Assistants	3	100

Source: Dentist Profile Survey, Advanced Practice Nurse Profile Survey, Physician Assistant Profile Survey, Office of Health Care Information.

Note: **Dentists** were included if they reported any hours per week spent in patient care, <u>and</u> they reported their primary practice as general practice, public health or pediatric dentistry.

**Advanced Practice Nurses** were included if they reported any hours per week spent in clinical care, <u>and</u> they reported their primary clinical practice focus as general practice, family health, pediatrics, or primary care, <u>or</u> they answered "yes" to the question "Do you provide pediatric care?"

**Physician Assistants** were included if they reported any hours per week spent in patient care, <u>and</u> they reported the services they provide as family/general practice, pediatrics/general, pediatrics/subspecialty, or public health/prevention.

Statewide in 1993, about 2,000 physicians practicing primary care specialties reported that they provide pediatric care. Most of these physicians reported their practice specialty as Family Practice (1,144) or Pediatrics (507).

Statewide, about half of all dentists reported that they serve Medicaid patients.

Table 8. Number of "Preventable" Hospitalizations by Selected Diagnoses, Children Ages 1-14, 1994

Diagnosis at			Total
Discharge	<b>Ages 1-4</b>	<b>Ages 5-14</b>	<b>Ages 1-14</b>
Asthma	30	19	49
Bacterial pneumonia	42	15	57
Dehydration, primary	21	10	31
Dehydration, secondary	29	22	51
Gastroenteritis	8	3	11
Other "preventable"	27	14	41
Total "Preventable"	157	83	240

Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: "Preventable hospitalizations" include all hospitalizations for the 28 conditions that have been defined as "ambulatory-care-sensitive." (See Technical Notes for ICD-9-CM codes and a description of the process for defining ambulatory-care-sensitive conditions.) Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected.

Provision of timely and appropriate preventive and primary care can decrease hospitalizations for ambulatory-caæ-sensitive conditions by:

- preventing the onset of the condition;
- controlling an acute episodic illness or condition;
- managing the condition.

Table 9. "Preventable" Hospitalizations for Children Ages 1-14, Five-Year Average, 1990-1994

	Rate		Your City Is:			
Age Groups	Number	City	State	Low	Medium	High
1-4	177	32.5	17.6			X
5-14	84	7.0	5.4			X
Total "Preventable"	262	14.9	8.8			X

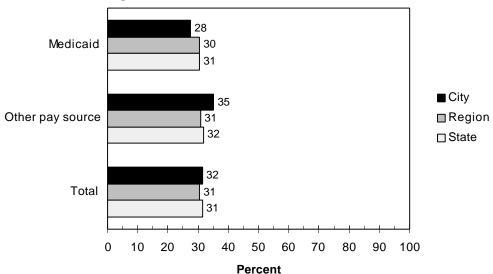
Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: Rate is the number of "preventable" hospitalizations per 1,000 children in the age group. Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected. The county distribution of preventable hospitalization rates determines the city rank. A city is "low" if it is in the lowest quartile (≤ 14.3 for age group 1-4; ≤ 4.0 for age group 5-14; ≤ 6.8 for age group 1-14), or "high" if it is in the highest quartile ≥ 22.0 for age group 1-4; ≥ 5.9 for age group 5-14; ≥ 9.9 for age group 1-14).

Statewide, about 8,000 hospitalizations of children ages 1-14 in 1994 were "preventable" hospitalizations, that is, for conditions that can usually be managed by adequate preventive and primary care.

Statewide, "preventable" hospitalizations of children ages 1-14 averaged 8.8 per 1,000 children annually for the period 1990-1994.

Figure 12. "Preventable" Hospitalizations as a Percent of All Hospitalizations Among Children Ages 1-14, 1994



Statewide, the proportion of children's hospitalizations classified as "preventable" was similar among those billed to Medicaid (31 percent) and those billed to other payers (32 percent).

Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Center for Health Statistics.

Note: Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected and for hospitalizations by pay source and age of child.

Table 10. Number and Total Charges for "Preventable"
Hospitalizations by Source of Payment, Children 1-14, 1994

	Other Pay			
"Preventable" Hospitalizations	Medicaid	Source	Total	
Total Number	98	142	240	
Percent Emergency Room Admissions	70%	54%	61%	
Total Hospital Charges (in thousands)	\$323.8	\$415.4	\$739.2	

Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected. Hospital charges exclude physician charges.

Statewide in 1994, "preventable" hospitalizations accounted for more than \$25 million in hospital charges for children ages 1-14.

Table 11. Number of Hospitalizations for Leading Diagnoses, Children Ages 1-14, 1994

Diagnosis at Discharge			Total
(ICD-9-CM Codes)	Ages 1-4	Ages 5-14	Ages 1-14
Psychiatric (295-302,306-316)	1	109	110
Injury (800-999)	36	62	98
Asthma (493)	30	19	49
Pneumonia (480-486)	51	16	67
Upper respiratory (460-466)	31	7	38
All other	170	227	397
<b>Total Hospitalizations</b>	319	440	759

Source: Office of Health Care Information, hospital inpatient database.

Note: "Leading diagnoses" are determined by statewide frequencies of first-listed/primary diagnoses for children 1-14.

Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected.

In 1994, psychiatric disorders, injuries and asthma were the leading diagnostic categories for hospitalizations of Wisconsin children overall and for those ages 5-14.

#### **CHILD MORTALITY**

Note:

Table 12. Five-Year Average Child Mortality, 1990-94

	Average Annual	Average Mortality Rate	
Age Group	<b>Number of Deaths</b>	Region	State
1-4	1	39.2	38.3
5-14	2	19.3	21.3
Total	3	24.9	26.0

Source: 1990-94 death certificates, Wisconsin Center for Health Statistics.

The mortality rates for the region and state are the number of deaths per 100,000 children in the age group. No rates by county are presented.

Statewide, about 270 deaths among children ages 1-14 occurred annually from 1990 through 1994.

#### PROGRAM INFORMATION

Table 13. Children in Selected Programs, 1994

Program	Ages	Number of Participants
Medicaid Total	1-4	2,300
AFDC-Related		1,857
Healthy Start		331
SSI and Katie Beckett		111
Medicaid Total	5-14	3,277
AFDC-Related		2,582
Healthy Start		270
SSI and Katie Beckett		425
WIC	1-4	1,587
Birth to Three	<3	

Source: Bureau of Health Care Financing (Medicaid data); Bureau of Public Health (WIC data); Division of Community Services (Birth to Three data).

Note: Medicaid participant counts are point-in-time estimates that include all eligible children, both those receiving health care on a fee-for-service basis and those enrolled in HMOs (health maintenance organizations). Children may be eligible for Medicaid according to the following classifications:

- AFDC (Aid to Families with Dependent Children)
- Healthy Start a Wisconsin program to extend health care coverage to pregnant women and young children with income levels up to 185 percent of poverty
- SSI (Supplemental Security Income) and Katie Beckett two programs that assist children with serious disabilities.

WIC (the Special Supplemental Nutrition Program for Women, Infants and Children) participant data represent point-in-time counts for December, 1994. (See Technical Notes for WIC program services.)

The Birth to Three Program count is a cumulative total for the one-year period December 1, 1993 through November 30, 1994. Eligibility criteria include:

- Age less than three, and
- A diagnosed developmental disability, or
- A significant delay in one or more areas of development.

Statewide, at any given time in 1994, about 82,000 children ages 1-4 and 128,000 children ages 5-14 were enrolled in Medicaid. About 65,000 children ages 1-4 received WIC services in 1994.

Table 14. Number of Children with Selected Fee-For-Service (FFS)
Medicaid Services by Eligibility Status, 1994

	AFDC-	Healthy	SSI & Katie	
Service	Related	Start	Beckett	Total
Eligible Children Ages 1-4				
(FFS Only)				
Cumulative total for year	2,749	872	140	3,254
Point-in-time estimate	1,806	328	107	2,241
Preventive Services				
Comprehensive HealthCheck	552	64	2	618
Any preventive health exam	1,105	197	6	1,308
Eligible Children Ages 5-14				
(FFS Only)				
Cumulative total for year	3,559	688	496	4,297
Point-in-time estimate	2,526	265	416	3,209
Preventive Services				
Comprehensive HealthCheck	264	15	15	294
Any preventive health exam	652	67	35	754
Dental Service	1,134	124	58	1,316

The Wisconsin
Medicaid program
paid for nearly
21,000
HealthCheck
examinations for
children ages 1-4
and almost 15,000
examinations for
children ages 5-14
on a fee-forservice basis in
1994.

Source: Bureau of Health Care Financing.

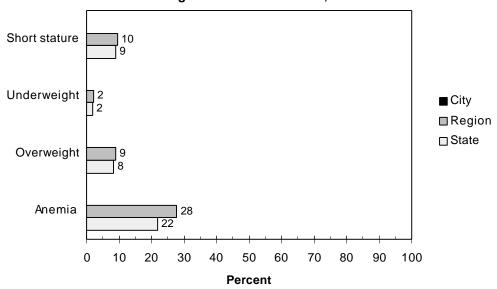
Note: The cumulative total represents an unadjusted count of children eligible for Medicaid on a fee-for-service basis in 1994, including those eligible only a portion of the year.

The point-in-time estimate is the cumulative total adjusted for duration of eligibility; this provides a "snapshot" of eligible children at any given time in 1994. The point-in-time counts in this table are not comparable to the data from Table 13 because Table 14 excludes children enrolled in Medicaid HMOs (health maintenance organizations) and includes children who became eligible retroactively.

The category "any preventive health exam" includes both HealthCheck and other comprehensive preventive examinations. (See Technical Notes.)

CITY OF KENOSHA CHILDREN 15

Figure 13. Selected Nutritional Status Indicators for Children Ages 0-4 Enrolled in WIC, 1994



Statewide, children ages 0-4 enrolled in WIC during 1994 had various nutritional needs, including anemia (22 percent of enrollees).

Source: CDC Pediatric Nutrition Surveillance System, 1994 Annual Summary for Wisconsin.

Data based on reports from all Wisconsin clinics delivering WIC services (Special Supplemental Nutrition Program for Women, Infants and Children).

Note: "Short stature" is low height for age; "underweight" is low weight for height; "overweight" is high weight for height; "anemia" is a low value on a hemoglobin or hematocrit test. Low (or high) values are values below the 5th percentile (or above the 95th percentile) of a reference sample of U.S. children.

Table 15. Number of Children with High Blood Lead Levels, 1995

Number of children with high blood lead levels	197
High levels as a percent of all children screened	19%

Source: Bureau of Public Health.

Note: Data are for fiscal year ending June 30, 1995. "High" blood lead levels are defined as lead levels of 10 micrograms per deciliter or higher.

Number of children with high blood lead levels is based on reports from all testing sources; percent of children screened who have high levels is based on reports from the Milwaukee City Health Department Laboratory, the Racine City Health Department Laboratory, and the Wisconsin State Laboratory of Hygiene.

Statewide, 21 percent of Wisconsin children who were tested for lead exposure had high blood lead levels.

CITY OF KENOSHA CHILDREN 16

# Table 16. Reports of Child Abuse and Neglect, Children Ages 0-17, 1994

Total reports

Reports per 1,000 children

Substantiated reports

Substantiated reports per 1,000 children

Percent of reports substantiated

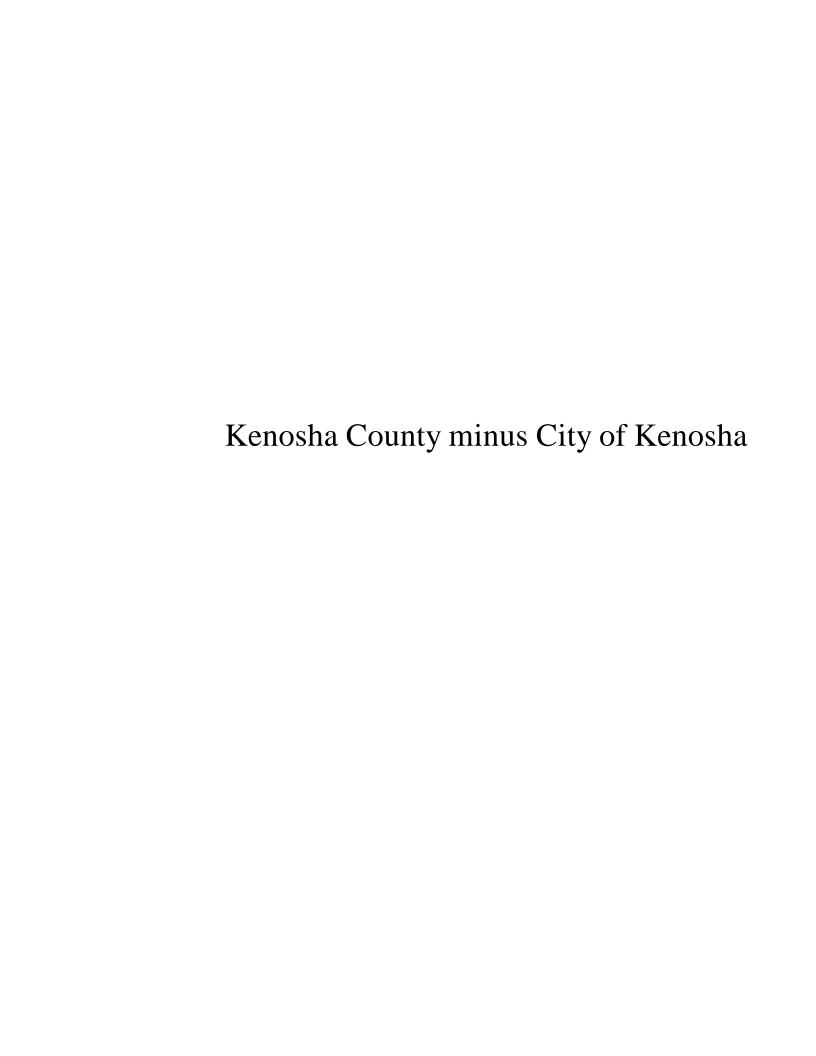
Data for this table are not available below the county level.

Source: Division of Children and Family Services, Department of Health and Family Services (*Annual Child Abuse and Neglect Report*, 1994 Data).

Note: "Substantiated" reports are those in which the investigating agency determines the child to be "in need of protective intervention or protective services, or there is an ongoing need for protective services among the principals in the report."

Cases not substantiated are designated either "unsubstantiated" or "not able to substantiate." (See Technical Notes for definitions.)

Statewide, there were 14 substantiated reports of child abuse per 1,000 children in 1994.



#### **DEMOGRAPHICS**

Table 1. Number of Children Ages 0-17, 1990 and 1994

	1990	1994	Percent	1994	1994
Age Group	Census	<b>Estimate</b>	Change	Males	<b>Females</b>
<1	700	490	-30%		
1-4	2,860	2,400	-16%		
5-14	7,160	10,310	44%		
15-17	1,960	2,260	15%		
Total 0-17	12,680	15,460	22%		

Source: 1990 data are from the 1990 Census of Population and Housing, Modified Age-Race-Sex (MARS) file. 1994 estimates are from the Wisconsin Center for Health Statistics.

Note: The focus of this profile is children ages 1-14. Because some data sources do not permit an isolation of this age group, the numbers of children less than one year old and ages 15-17 are presented here for background information. Numbers have been rounded to the nearest 10.

From 1990 to 1994, the number of preschool-aged children in Wisconsin decreased, while the number of schoolaged children increased.

Table 2. Living Arrangements of Children Ages 0-17, 1990

		Other	Non-		
	Parental	Relative's	Relative's		
Age Group	Household	Household	Household	Other	Total
0-4	90.9%	7.3%	1.6%	0.1%	100%
5-14	94.2	3.6	2.1	0.1	100
15-17	94.9	2.9	2.2	0.0	100
Total 0-17	93.4	4.5	2.0	0.1	100%

Source: 1990 Census of Population and Housing, Summary Tape File 1.

Note: This table includes all childrenunder 18 years of age. Children's living arrangements are identified according to their relationship to the household head (householder). The "other" category includes children living in group homes or institutions.

"Other relative's household" and "non-relative's household" may include a child's parent. For example, the householder could be a grandparent in a three-generation home, or a friend of the parent who lives in the household

Statewide, children under five years of age are more likely than older children to be living in a household headed by someone other than their parent(s). Table 3. Percent of Children Ages 0-17 in Selected Poverty Categories, 1989

Age	<100%	100-149%	150-174%	175-184%	185+%	Total
0-4	8%	10%	6%	3%	73%	100%
5-11	7	8	5	2	78	100
12-17	5	6	3	1	86	100
Total 0-17	7	8	5	2	79	100%

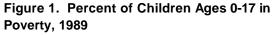
Source: 1990 Census of Population and Housing, Summary Tape File 4.

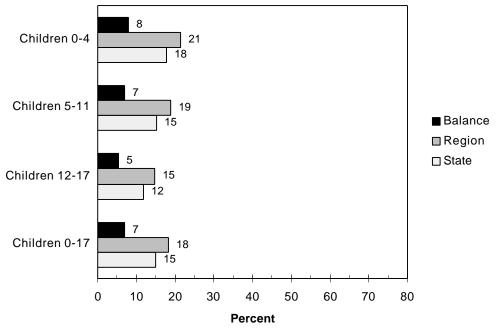
Note: Poverty status is based on 1989 family income reported in the 1990 Census. (See Technical Notes.)

The first column reflects the percent of children officially "in poverty," that is, below 100 percent of the poverty level (\$12,674 for a family of four in 1989). Children in families with incomes of 100 to 149 percent of the poverty level are in the second column, and so on.

Wisconsin children ages 0-17 lived in households with income below poverty, based on 1989 household income reported to the U.S. Census.

About 15 percent of





The proportion of Wisconsin children in poverty was higher among the youngest children, ages 0-4 (18 percent), and children ages 5-11 (15 percent) than among older children, ages 12-17 (12 percent).

Source: 1990 Census of Population and Housing, Summary Tape File 4a.

Note: "In poverty" means that 1989 household income was less than 100 percent of the federal poverty guidelines. (See Technical Notes for more detail.)

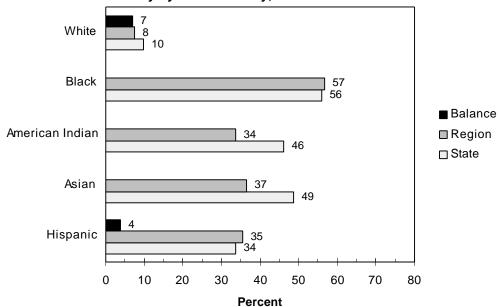
Table 4. Number of Children Ages 0-17 by Race/Ethnicity, 1990

	American				
Age Group	White	Black	Indian	Asian	Hispanic
<1	660	10	0	10	30
1-4	2,730	10	10	20	90
5-14	6,850	20	40	40	210
15-17	1,890	0	10	10	40
Total 0-17	12,130	40	60	80	370

Source: 1990 Census, Modified Age-Race-Sex (MARS) file.

Note: Race/ethnic categories in this table are mutually exclusive non-Hispanic white, non-Hispanic black, non-Hispanic American Indian, non-Hispanic Asian, and Hispanic. Numbers have been rounded to the nearest 10.

Figure 2. Percent of Children Ages 0-17 in Poverty by Race/Ethnicity, 1989



Source: 1990 Census of Population and Housing, Summary Tape File 4.

Note: Unlike the data in Table 4, race/ethnic categories in this figure are<u>not</u> mutually exclusive. Hispanics thus appear both in the race categories and separately in the Hispanic category. (Hispanics may be of any race.)

"In poverty" means that 1989 household income was less than 100 percent of the federal poverty guidelines. (See Technical Notes for more detail.)

Statewide, about 174,000 children under age 18 were either Hispanic or belonged to a racial minority group.

Statewide in 1989, the proportions of children who lived in households with income below the poverty level were: 10 percent of white children, 56 percent of black children, 46 percent of American Indian children, 49 percent of Asian children, and 34 percent of Hispanic children.

Table 5. Living Arrangements of Children Ages 0-17 in Parental Households, 1990

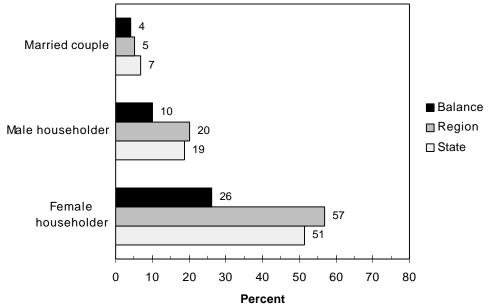
Age Groups	Parent Householder, Spouse Present	Father Householder, No Wife Present	Mother Householder, No Husband Present	All Non- Parental Households	Total
0-4	79%	3%	8%	9%	100%
5-14	83	2	9	6	100
15-17	81	6	8	5	100
Total 0-17	82	3	9	7	100%

Statewide in 1990, about 77 percent of children lived in a married-couple household headed by a parent.

Source: 1990 Census of Population and Housing, Summary Tape File 3.

Note: This table provides more detail about children living in parental households than is shown in Table 2. The Census classifies children living with a parent who is not the householder as living in a "non-parental household."

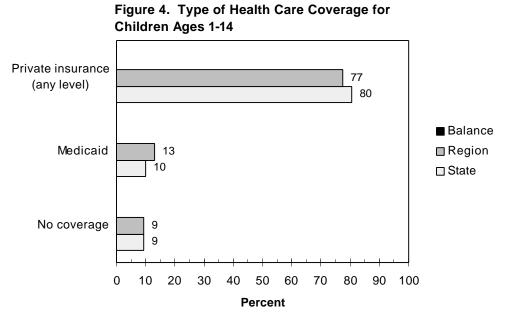
Figure 3. Percent of Children Ages 0-17 in Poverty by Family Type, 1989



Children living in families with a female householder (no spouse present) experienced higher poverty rates than other children.

Source: 1990 Census of Population and Housing, Summary Tape File 3a.

Note: The Census data from which this figure was derived differ somewhat from Table 5. This figure includes all children related to the household head, whether parent or other relative.

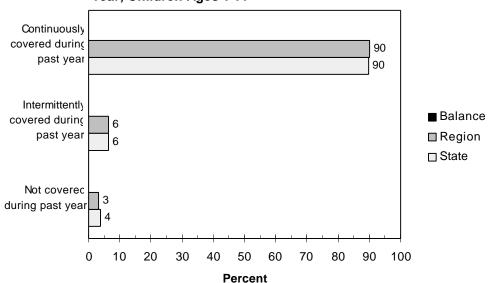


Most Wisconsin children ages 1-14 had some type of private health care coverage.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown. (See Technical Notes for comparison of Family Health Survey and Medicaid Program enrollment data.)

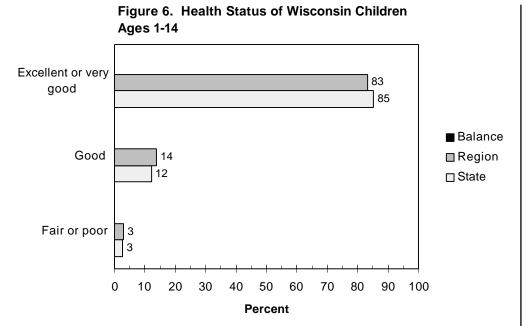
Figure 5. Health Care Coverage Over Past Year, Children Ages 1-14



Statewide, about 6 percent of children ages 1-14 had interruptions in their health care coverage during the past year, while 4 percent had no coverage for the entire year.

Source: Family Health Survey, 1993-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.



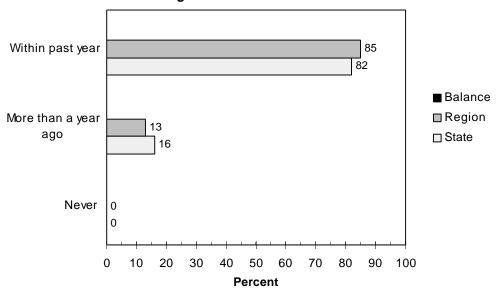
An overwhelming majority of Wisconsin children (97 percent) were reported to have good to excellent health.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.

### **HEALTH SERVICES**

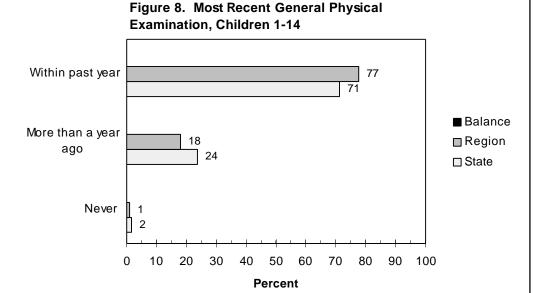
Figure 7. Most Recent Visit to a Doctor, Children Ages 1-14



Most (82 percent) Wisconsin children ages 1-14 visited a doctor for either preventive or acute care during the past year.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.

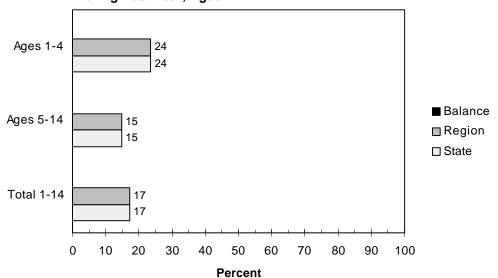


Statewide, about 70 percent of children ages 1-14 received a general physical examination within the past year, an indicator of preventive health care.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.

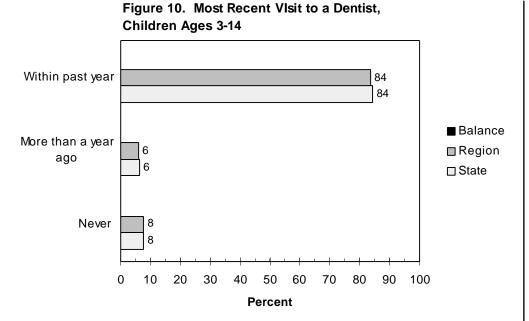
Figure 9. Treated in Hospital Emergency Room During Past Year, Ages 1-14



Seventeen percent of all Wisconsin children ages 1-14 were treated in an emergency room in the past year.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown.



Statewide, more than 80 percent of children ages 3-14 saw a dentist within the past year; about 8 percent have never visited a dentist.

Source: Family Health Survey, 1990-94 combined data, Center for Health Statistics.

Note: Estimates based on <200 interviews are not shown. Responses may not total 100 percent due to rounding and/or because nonresponse categories are not shown.

Have Had Dental Sealants Placed on Their Teeth 70 60 50 Wisconsin 49 50 Year 2000 Objective 40 30 20 10 0 Region State

Figure 11. Percent of Children Ages 8-14 Who

Source: 1994 Family Health Survey, Center for Health Statistics.

With the exception of the Southeastern Region, the estimated percent of children Note: with dental sealants in each region is based on a small sample size (see Technical Notes). The possible error in estimation is larger when the sample size is small.

Statewide, an estimated 49 percent of children ages 8-14 had dental sealants placed on their teeth. This percent almost meets the Wisconsin Year 2000 objective of 50 percent.

Table 6. Primary Care Physicians Who Provide Pediatric Care, 1993

Specialty	Provide Pediatric Care	Serve Medicaid Patients
Total Primary Care	5	100%
Family Practice	5	100
Pediatrics	0	0
Internal Medicine	0	0
General Practice	0	0
Obstetrics/Gyn.	0	0
Psychiatry/Child Psych.	0	0

Source: 1993 Physician Profile Survey, Office of Health Care Information; tape edited by Wisconsin Primary Health Care Association.

Note: Physicians were included if they indicated that they provide care in this profile's geographical area. Physicians who provide care in more than one area are included in the profiles for both areas. Psychiatrists are not included in the total primary care count.

The final column of this table indicates the percent of physicians providing pediatric care who reported they serve Medicaid patients.

Table 7. Other Health Care Professionals Who May Provide Pediatric Care, 1993

	Provide	Serve Medicaid
Provider Type	Pediatric Care	Patients
Dentists	6	0%
Advanced Practice Nurses	1	100
Physician Assistants	0	0

Source: Dentist Profile Survey, Advanced Practice Nurse Profile Survey, Physician Assistant Profile Survey, Office of Health Care Information.

Note: **Dentists** were included if they reported any hours per week spent in patient care, <u>and</u> they reported their primary practice as general practice, public health or pediatric dentistry.

**Advanced Practice Nurses** were included if they reported any hours per week spent in clinical care, <u>and</u> they reported their primary clinical practice focus as general practice, family health, pediatrics, or primary care, <u>or</u> they answered "yes" to the question "Do you provide pediatric care?"

**Physician Assistants** were included if they reported any hours per week spent in patient care, <u>and</u> they reported the services they provide as family/general practice, pediatrics/general, pediatrics/subspecialty, or public health/prevention.

Statewide in 1993, about 2,000 physicians practicing primary care specialties reported that they provide pediatric care. Most of these physicians reported their practice specialty as Family Practice (1,144) or Pediatrics (507).

Statewide, about half of all dentists reported that they serve Medicaid patients.

Table 8. Number of "Preventable" Hospitalizations by Selected Diagnoses, Children Ages 1-14, 1994

Diagnosis at			Total
Discharge	<b>Ages 1-4</b>	<b>Ages 5-14</b>	<b>Ages 1-14</b>
Asthma	5	0	5
Bacterial pneumonia	7	6	13
Dehydration, primary	2	4	6
Dehydration, secondary	1	5	6
Gastroenteritis	4	2	6
Other "preventable"	3	4	7
Total "Preventable"	22	21	43

Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: "Preventable hospitalizations" include all hospitalizations for the 28 conditions that have been defined as "ambulatory-care-sensitive." (See Technical Notes for ICD-9-CM codes and a description of the process for defining ambulatory-care-sensitive conditions.) Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected.

Provision of timely and appropriate preventive and primary care can decrease hospitalizations for ambulatory-care-sensitive conditions by:

- preventing the onset of the condition;
- controlling an acute episodic illness or condition;
- managing the condition.

Table 9. "Preventable" Hospitalizations for Children Ages 1-14, Five-Year Average, 1990-1994

	Ra	te	Y	our Area Is	S:	
Age Groups	Number	Area	State	Low	Medium	High
1-4	22	8.4	17.6	X		-
5-14	17	2.0	5.4	X		
Total "Preventable"	40	3.5	8.8	X		

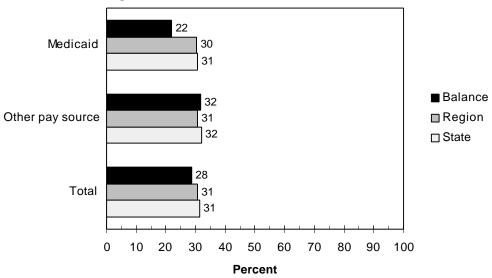
Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: Rate is the number of "preventable" hospitalizations per 1,000 children in the age group. Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected. The county distribution of preventable hospitalization rates determines the area rank. A area is "low" if it is in the lowest quartile (≤ 14.3 for age group 1-4; ≤ 4.0 for age group 5-14; ≤ 6.8 for age group 1-14), or "high" if it is in the highest quartile ≥ 22.0 for age group 1-4; ≥ 5.9 for age group 5-14; ≥ 9.9 for age group 1-14).

Statewide, about 8,000 hospitalizations of children ages 1-14 in 1994 were "preventable" hospitalizations, that is, for conditions that can usually be managed by adequate preventive and primary care.

Statewide, "preventable" hospitalizations of children ages 1-14 averaged 8.8 per 1,000 children annually for the period 1990-1994.

Figure 12. "Preventable" Hospitalizations as a Percent of All Hospitalizations Among Children Ages 1-14, 1994



Statewide, the proportion of children's hospitalizations classified as "preventable" was similar among those billed to Medicaid (31 percent) and those billed to other payers (32 percent).

Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Center for Health Statistics.

Note: Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected and for hospitalizations by pay source and age of child.

Table 10. Number and Total Charges for "Preventable"
Hospitalizations by Source of Payment, Children 1-14, 1994

	Other Pay			
"Preventable" Hospitalizations	Medicaid	Source	Total	
Total Number	11	32	43	
Percent Emergency Room Admissions	55%	44%	47%	
Total Hospital Charges (in thousands)	\$253.7	\$92.6	\$346.3	

Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wiscorin Center for Health Statistics.

Note: Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected. Hospital charges exclude physician charges.

Statewide in 1994, "preventable" hospitalizations accounted for more than \$25 million in hospital charges for children ages 1-14.

In 1994, psychiatric

Table 11. Number of Hospitalizations for Leading Diagnoses, Children Ages 1-14, 1994

Diagnosis at Discharge			Total
(ICD-9-CM Codes)	Ages 1-4	Ages 5-14	Ages 1-14
Psychiatric (295-302,306-316)	0	20	20
Injury (800-999)	4	14	18
Asthma (493)	5	0	5
Pneumonia (480-486)	7	6	13
Upper respiratory (460-466)	8	0	8
All other	26	61	87
Total Hospitalizations	50	101	151

Source: Office of Health Care Information, hospital inpatient database.

Note:

"Leading diagnoses" are determined by statewide frequencies of first-listed/primary diagnoses for children 1-14.

Hospitalizations that occurred out-of-state are not included; see Technical Notes for a list of counties most affected.

disorders, injuries and asthma were the leading diagnostic categories for hospitalizations of Wisconsin children overall and for those ages 5-14.

## **CHILD MORTALITY**

Table 12. Five-Year Average Child Mortality, 1990-94

	Average Annual	Average Mortality Rate		
Age Group	<b>Number of Deaths</b>	Region	State	
1-4	0	39.2	38.3	
5-14	1	19.3	21.3	
Total	2	24.9	26.0	

Source: 1990-94 death certificates, Wisconsin Center for Health Statistics.

Note:

The mortality rates for the region and state are the number of deaths per 100,000 children in the age group. No rates by county are presented.

Statewide, about 270 deaths among children ages 1-14 occurred annually from 1990 through 1994.

### PROGRAM INFORMATION

Table 13. Children in Selected Programs, 1994

Program	Ages	Number of Participants
Medicaid Total	1-4	380
AFDC-Related		277
Healthy Start		106
SSI and Katie Beckett		0
Medicaid Total	5-14	511
AFDC-Related		425
Healthy Start		75
SSI and Katie Beckett		11
WIC	1-4	172
Birth to Three	<3	

Source: Bureau of Health Care Financing (Medicaid data); Bureau of Public Health (WIC data); Division of Community Services (Birth to Three data).

Note: Medicaid participant counts are point-in-time estimates that include all eligible children, both those receiving health care on a fee-for-service basis and those enrolled in HMOs (health maintenance organizations). Children may be eligible for Medicaid according to the following classifications:

- AFDC (Aid to Families with Dependent Children)
- Healthy Start a Wisconsin program to extend health care coverage to pregnant women and young children with income levels up to 185 percent of poverty
- SSI (Supplemental Security Income) and Katie Beckett two programs that assist children with serious disabilities.

WIC (the Special Supplemental Nutrition Program for Women, Infants and Children) participant data represent point-in-time counts for December, 1994. (See Technical Notes for WIC program services.)

The Birth to Three Program count is a cumulative total for the one-year period December 1, 1993 through November 30, 1994. Eligibility criteria include:

- Age less than three, and
- A diagnosed developmental disability, or
- A significant delay in one or more areas of development.

Statewide, at any given time in 1994, about 82,000 children ages 1-4 and 128,000 children ages 5-14 were enrolled in Medicaid. About 65,000 children ages 1-4 received WIC services in 1994.

Table 14. Number of Children with Selected Fee-For-Service (FFS)
Medicaid Services by Eligibility Status, 1994

	A ED C	TT 1/1	SSI &	
g :	AFDC-	Healthy	Katie	7D 4 1
Service	Related	Start	Beckett	<u>Total</u>
Eligible Children Ages 1-4				
(FFS Only)				
Cumulative total for year	623	218	0	754
Point-in-time estimate	328	109	0	433
Preventive Services				
Comprehensive HealthCheck	118	31	16	165
Any preventive health exam	239	83	44	366
Eligible Children Ages 5-14				
(FFS Only)				
Cumulative total for year	820	193	27	958
Point-in-time estimate	478	80	20	577
Preventive Services				
Comprehensive HealthCheck	79	11	24	114
Any preventive health exam	142	24	67	233
Dental Service	299	51	95	445

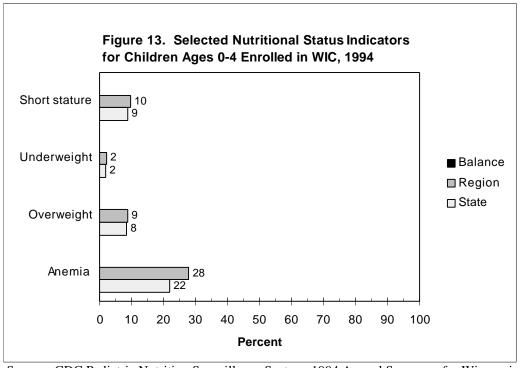
The Wisconsin
Medicaid program
paid for nearly
21,000
HealthCheck
examinations for
children ages 1-4
and almost 15,000
examinations for
children ages 5-14
on a fee-forservice basis in
1994.

Source: Bureau of Health Care Financing.

Note: The cumulative total represents an unadjusted count of children eligible for Medicaid on a fee-for-service basis in 1994, including those eligible only a portion of the year.

The point-in-time estimate is the cumulative total adjusted for duration of eligibility; this provides a "snapshot" of eligible children at any given time in 1994. The point-in-time counts in this table are not comparable to the data from Table 13 because Table 14 excludes children enrolled in Medicaid HMOs (health maintenance organizations) and includes children who became eligible retroactively.

The category "any preventive health exam" includes both HealthCheck and other comprehensive preventive examinations. (See Technical Notes.)



Statewide, children ages 0-4 enrolled in WIC during 1994 had various nutritional needs, including anemia (22 percent of enrollees).

Source: CDC Pediatric Nutrition Surveillance System, 1994 Annual Summary for Wisconsin.

Data based on reports from all Wisconsin clinics delivering WIC services (Special Supplemental Nutrition Program for Women, Infants and Children).

Note: "Short stature" is low height for age; "underweight" is low weight for height; "overweight" is high weight for height; "anemia" is a low value on a hemoglobin or hematocrit test. Low (or high) values are values below the 5th percentile (or above the 95th percentile) of a reference sample of U.S. children.

Table 15. Number of Children with High Blood Lead Levels, 1995

Number of children with high blood lead levels	
High levels as a percent of all children screened	15%

Source: Bureau of Public Health.

Note: Data are for fiscal year ending June 30, 1995. "High" blood lead levels are defined as lead levels of 10 micrograms per deciliter or higher.

Number of children with high blood lead levels is based on reports from all testing sources; percent of children screened who have high levels is based on reports from the Milwaukee City Health Department Laboratory, the Racine City Health Department Laboratory, and the Wisconsin State Laboratory of Hygiene.

Statewide, 21 percent of Wisconsin children who were tested for lead exposure had high blood lead levels.

# Table 16. Reports of Child Abuse and Neglect, Children Ages 0-17, 1994

Total reports

Reports per 1,000 children

Substantiated reports

Substantiated reports per 1,000 children

Percent of reports substantiated

Data for this table are not available below the county level.

Source: Division of Children and Family Services, Department of Health and Family Services (*Annual Child Abuse and Neglect Report*, 1994 Data).

Note: "Substantiated" reports are those in which the investigating agency determines the child to be "in need of protective intervention or protective services, or there is an ongoing need for protective services among the principals in the report."

Cases not substantiated are designated either "unsubstantiated" or "not able to substantiate." (See Technical Notes for definitions.)

Statewide, there were 14 substantiated reports of child abuse per 1,000 children in 1994.

#### **Technical Notes**

These technical notes supplement the information found below the tables and figures. More detailed technical notes can be found in the companion report, *Children's Health: Statewide Estimates*.

A dash (---) in a table cell and the absence of a bar in a figure indicate either that data are not available for a given geographic level, or that a stable estimate could not be calculated.

The Division of Health regions used in this reportreflect the boundaries in 1994, the reference period for most of the data. These were superseded in July 1996 with a new set of uniform regional boundaries for the Department of Health and Family Services.

**U.S. Census.** Individuals and families are assigned poverty status based on the relationship of 1989 family income reported in the 1990 Census to poverty guidelines. The poverty level for a family of four was \$12,674 in 1989. The Census tape from which poverty information is derived includes only selected age and poverty groups, and is based on sample data.

Figure 2 shows the percent of children in poverty in 1989 for those racial/ethnic groups for which the 1990 U.S. Census count of children in a given area was at least 200. Figure 3 shows the percent of Wisconsin children who were living in poverty in 1989 according to family type (married-couple, male-headed or female-headed). The data in this figure are somewhat different from a similar figure in the *Children's Health* report (Figure 1), which shows the percent of *families* (rather than the percent of *children*) in each category.

**Family Health Survey.** The Wisconsin Family Health Survey (FHS) is a statewide telephone survey using a stratified random sample of households in Wisconsin. One person in each household, who is most knowledgeable about the health of household members, answers the questions on behalf of all household members. Interviews are conducted each month of the year; a total of about 2,400 households are surveyed annually. Completed interviews are weighted to represent nonrespondents and to correct for disproportionate sampling rates across strata. The completed sample is considered to be representative of the Wisconsin household population, although it does not include any households without telephones and minority populations are somewhat underrepresented.

*Sample size*. For most of the FHS analyses in this report, data from five years (1990-1994) were combined. This was done to provide more stable estimates at the county and regional levels for the relatively small age group being considered. The reader should be aware that the confidence associated with estimates in these reports varies with the size of the sample used to produce the estimates. For example, estimates based on a sample of 200 might vary by as much as (plus or minus) 6 percent. In these profiles, estimates are not available below the county level, and county estimates based on fewer than 200 interviews are suppressed. In two instances ("health

care coverage over the past year," and "dental sealants") reported estimates were based on less than five years of data. Estimates of children with dental sealants were based on fewer than 200 cases for all regions except the Southeastern. All estimates are rounded to the nearest whole percentage (estimates that are less than 0.5 are rounded to 0).

Type of health care coverage. FHS information on the type of health care coverage among children (see Figure 4) indicates that 10 percent of Wisconsin children aged 1-14 in the years 1990-1994 were covered by Medicaid (Medical Assistance). This is a lower percentage than that estimated by the Wisconsin Medicaid Program (20 percent in 1994). Part of the difference between these two percentages is attributable to the under-representation of households at the lowest income levels in the Family Health Survey sample.

**Provider Files.** The Physician Profile Survey permitted physicians to report up to three specialties. Table 6 of this report shows the number of physicians according to the first primary care specialty reported in the 1993 Physician Profile Survey. Survey questions used for Table 6 were: 1) "Do you provide pediatric care?" 2) "Do you serve Medical Assistance patients (MA, Medicaid, Title XIX, T19)?"

In Table 7 the location of practice was assigned using zip code information for advanced practice nurses because the Advanced Practice Nurse Profile Survey does not include county information.

**Hospitalizations.** The hospital findings presented in this report are based on data submitted to the Office of Health Care Information, extracted from each hospital's Uniform Billing Record (UB-82 or UB-92). Table 8 is based on all inpatient hospitalizations of Wisconsin residents in the age groups specified discharged in 1994. Unless otherwise noted, hospitalizations by cause reflect the first-listed diagnosis. Source of payment reflects the "expected" source of payment. "Expected" is defined as the person or organization to whom the bill is originally submitted. In some instances, this will not necessarily be the person or organization that pays the bill.

"Preventable" hospitalizations. In this report, the list of conditions defined as being associated with preventable hospitalizations is based on a study undertaken by the United Hospital Fund of New York. The study examined whether low-income residents of New York experienced higher rates of hospitalization from illnesses that are potentially avoidable with good ambulatory care. Twenty-eight diagnoses were defined as "ambulatory-care-sensitive" conditions by a medical panel associated with the New York study (the Ambulatory Care Access Project, John Billings, principal investigator). The ICD-9-CM codes for these conditions are as follows:

Congenital syphilis (secondary diagnosis for newborns only): 090. Immunization preventable conditions: 033, 390, 391, 037, 045, 320.0 (ages 1-5). Grand mal status and other epileptic convulsions: 345. Convulsions "A": 780.3 (ages 0-5). Convulsions "B": 780.3 (ages > 5). Severe ear, nose and throat infections: 382 (exclude cases with insertion of myringotomy tubes), 462, 463, 465, 472.1. Pulmonary tuberculosis: 011. Other tuberculosis: 012-018. Chronic obstructive pulmonary disease: 491, 492, 494, 496, 466.0 (only with secondary diagnosis of 491, 492, 494, 496). Bacterial pneumonia (exclude cases with secondary diagnosis of sickle cell anemia and patients less than 2 months old) 481, 482.2, 482.3, 482.9, 483, 485, 486. Asthma: 493. Congestive heart failure (exclude cases with pacemaker, angioplasty, transplant or bypass procedures): 428, 402.01, 402.11, 402.91, 518.4. Hypertension (exclude cases with pacemaker, angioplasty,

transplant or bypass procedures): 401.0, 401.9, 402.00, 402.10, 402.90. **Angina** (exclude cases with a surgical procedure): 411.1, 411.8, 413. **Cellulitis** (exclude cases with a surgical procedure, except if 86.0 (incision of skin and subcutaneous tissue) is the only listed procedure): 681-683, 686. **Skin grafts with cellulitis** (exclude admissions from SNF/ICF) DRG 263 and 264. **Diabetes A**: 250.1, 250.2, 250.3. **Diabetes B**: 250.8, 250.9. **Diabetes C**: 250.0. **Hypoglycemia**: 251.2. **Gastroenteritis**: 558.9. **Kidney/urinary infection**: 590, 599.0, 599.9. **Dehydration - volume depletion** (examine principal and secondary diagnoses separately): 276.5. **Iron deficiency anemia** (ages 0-5 only, examine principal and secondary diagnoses separately): 280.1, 280.8, 280.9. **Nutritional deficiencies** (examine principal and secondary diagnoses separately): 260-262, 268.0, 268.1. **Failure to thrive** (ages < 1 only): 783.4. **Pelvic inflammatory disease** (women only, exclude cases with a hysterectomy): 614. **Dental conditions**: 521-523, 525, 528.

For Table 9 in this report, hospitalization information for the years 1990-1994 was combined to permit calculation of comparable rates of "preventable" hospitalizations by county. Denominators for calculating average age-specific hospitalization rates for the five-year period 1990-1994 were obtained by averaging the number of children in the population in 1990 and in 1994.

In the analysis of hospitalization rates by county, no data were available for Wisconsin residents hospitalized in other states. Caution is therefore advised when analyzing hospitalization rates for residents of border counties. The counties most affected by this care pattern are: Ashland, Barron, Bayfield, Buffalo, Burnett, Douglas, Dunn, Florence, Grant, Iron, Marinette, Pepin, Pierce, Polk, St. Croix, and Washburn. It is possible that some of these counties would show higher rates of hospitalization if more complete data were available.

The proportions shown in Figure 12 are based on number of hospitalizations by pay source. In 1994, there were 9,561 hospitalizations among children ages 1-4; 47 percent were billed to Medicaid and 53 percent to other pay sources. Among children ages 5-14, there were 16,108 total hospitalizations; 39 percent were billed to Medicaid and 61 percent to other pay sources.

**Mortality.** Denominators for calculating average five-year mortality rates reported in Table 12 were obtained by averaging the number of children in the population in 1990 and in 1994.

**Program Information.** Most of the information in this section is based on counts of children receiving services in specific programs, including the Medicaid Program, Birth to Three Program, and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). The statistics presented refer to children in the respective program only, and are not representative of the total population of children in the state.

*Birth to Three.* Counts of children enrolled in the Birth to Three program in Table 13 are not available below the county level.

*Medicaid information*. Table 14 shows the number of children with fee-for-service Medicaid by three eligibility categories: AFDC-related, Healthy Start, and SSI/Katie Beckett. The "cumulative total for year" is a unique recipient count within any of these eligibility categories; however, since in a given year a person may become eligible for Medicaid through more than one program, the row total may be less than the sum of the three eligibility categories. For example, a child who became eligible for Medicaid through Healthy Start at the beginning of the year, and who later became eligible through AFDC, would be counted in both these categories but only once

in the row total. The "point-in-time" estimate is adjusted for duration of eligibility and shows a "snapshot" of eligible children at any given time in 1994. Table 13 also provides "point-in-time" estimates by eligibility categories but is not comparable to the data from Table 14 because Table 13 includes children enrolled in Medicaid HMOs (health maintenance organizations) and Table 14 includes children who became eligible retroactively. In a handful of cases, counts at the city level were higher than counts at the corresponding county level because of discrepant city and county (ascertained from the zip code) information on the Medicaid records. When this occurred, the number reported for the balance of county was zero.

In the Medicaid data shown in Table 14, "Any preventive health exam" includes both HealthCheck (MA code W7000) and preventive medicine services (CPT-4 codes 99381-99384, 99391-99394), which comprise both initial and periodic "evaluation and management of an individual including a comprehensive history, a comprehensive examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of appropriate laboratory/diagnostic procedures" (*Current Procedural Terminology*, 1996 edition, American Medical Association).

WIC. The nutritional status indicators in Figure 13 are from the 1994 Pediatric Nutrition Surveillance System (PedNSS) data for Wisconsin. The data for Wisconsin are limited to information for children under five years of age enrolled in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). WIC provides nutrition education, supplemental foods, and health and social service referrals for pregnant, breastfeeding and postpartum women, infants and young children. Data are based on reports from all Wisconsin clinics delivering WIC services. Data from Indian reservation clinics were excluded from county estimates as these clinics may serve multiple counties. Except for the citiesof Milwaukee, Madison, and Racine, data are not available below the county level.

*Lead program information.* Table 15 information about Wisconsin children with elevated blood lead levels (10 micrograms per deciliter or higher) is collected by the Childhood Lead Poisoning Prevention Program in the Bureau of Public Health, Division of Health.

Child abuse and neglect. The reports of child abuse and neglect presented in Table 16 are not available below the county level. Reports actually are a count of children suspected of being abused or neglected. A child abuse case which is documented on a child abuse form may include more than one abuse victim. Reports are a count of the children reported, not the number of forms received. A case is designated "unsubstantiated" when a child or other principals of the report are not in need of protective intervention or protective services. A case is designated "not able to substantiate" when critical information necessary to finalize a determination cannot be obtained.